| 19 | 95 | 257/780.ccls. and (mask or nonwettable or nonwet or (non adj wettable)) and (@ad<19991110) and (fatigue or stress or expansion or contraction) | USPAT; EPO; JPO; DERWENT; IBM_TDB | 2004/03/29 14:11 |
|---|---|---|---|---|
| 20 | 60 | (257/780.ccls. and (mask or nonwettable or nonwet or (non adj wettable)) and (@ad<19991110) and (fatigue or stress or expansion or contraction)) not (257/778.ccls. and (mask or nonwettable or nonwet or (non adj wettable)) and (@ad<19991110) and (fatigue or stress or expansion or contraction)) | USPAT; EPO; JPO; DERWENT; IBM_TDB | 2004/03/29 14:11 |
| 21 | 101376 | (@ad<19991110) and ((fatigue or stress or expansion or contraction) with (direction or align or aligned or oriented or orient or position or positioned)) | USPAT; EPO; JPO; DERWENT; IBM_TDB | 2004/03/29 14:14 |
| 22 | 137 | ((@ad<19991110) and ((fatigue or stress or expansion or contraction) with (direction or align or aligned or oriented or orient or position or positioned))) and ((pad or pads) with (mask or nonwettable or nonwet or (non adj wettable)) and (@ad<19991110)) | USPAT; EPO; JPO; DERWENT; IBM_TDB | 2004/03/29 14:15 |
| 23 | 131 | (((@ad<19991110) and ((fatigue or stress or expansion or contraction) with (direction or align or aligned or oriented or orient or position or positioned))) and ((pad or pads) with (mask or nonwettable or nonwet or (non adj wettable)) and (@ad<19991110))) not (257/778.ccls. and (mask or nonwettable or nonwet or (non adj wettable)) and (@ad<19991110) and (fatigue or stress or expansion or contraction)) | USPAT; EPO; JPO; DERWENT; IBM_TDB | 2004/03/29 14:15 |
| 24 | 136 | (((@ad<19991110) and ((fatigue or stress or expansion or contraction) with (direction or align or aligned or oriented or orient or position or positioned))) and ((pad or pads) with (mask or nonwettable or nonwet or (non adj wettable)) and (@ad<19991110))) not ((257/737.ccls. and (mask or nonwettable or nonwet or (non adj wettable)) and (@ad<19991110) and (fatigue or stress or expansion or contraction)) not (257/778.ccls. and (mask or nonwettable or nonwet or (non adj wettable)) and (@ad<19991110) and (fatigue or stress or expansion or contraction))) | USPAT; EPO; JPO; DERWENT; IBM_TDB | 2004/03/29 14:15 |
| 25 | 130 | ((((@ad<19991110) and ((fatigue or stress or expansion or contraction) with (direction or align or aligned or oriented or orient or position or positioned))) and ((pad or pads) with (mask or nonwettable or nonwet or (non adj wettable)) and (@ad<19991110))) not (257/778.ccls. and (mask or nonwettable or nonwet or (non adj wettable)) and (@ad<19991110) and (fatigue or stress or expansion or contraction))) not ((257/737.ccls. and (mask or nonwettable or nonwet or (non adj wettable)) and (@ad<19991110) and (fatigue or stress or expansion or contraction)) not (257/778.ccls. and (mask or nonwettable or nonwet or (non adj wettable)) and (@ad<19991110) and (fatigue or stress or expansion or contraction))) | USPAT; EPO; JPO; DERWENT; IBM_TDB | 2004/03/29 14:15 |
| 26 | 1500 | 438/$.ccls. and ((solder or interconnection or interconnect or ball or bump) with (fatigue or stress or expansion or contraction)) | USPAT; EPO; JPO; DERWENT; IBM_TDB | 2004/03/29 14:18 |

| 27 | 1500 | 438/$.ccls. and ((solder or interconnection or interconnect or ball or bump) with (fatigue or stress or expansion or contraction)) | USPAT; EPO; JPO; DERWENT; IBM_TDB | 2004/03/29 14:18 |
|---|---|---|---|---|
| 28 | 629 | (438/$.ccls. and ((solder or interconnection or interconnect or ball or bump) with (fatigue or stress or expansion or contraction))) and mask | USPAT; EPO; JPO; DERWENT; IBM_TDB | 2004/03/29 14:19 |

| L Number | Hits | Search Text | DB | Time stamp |
|---|---|---|---|---|
| 1 | 1 | ("6218291").PN. | USPAT | 2004/03/29 12:25 |
| 2 | 1 | ("6218281").PN. | USPAT | 2004/03/29 12:30 |
| 3 | 2 | (("6211937") or ("5872404")).PN. | USPAT | 2004/03/29 12:43 |
| 4 | 2 | (("6118182") or ("6194667")).PN. | USPAT | 2004/03/29 13:18 |
| 5 | 6174 | (pad or pads) with (mask or nonwettable or nonwet or (non adj wettable)) and (@ad<19991110) | USPAT; EPO; JPO; DERWENT; IBM_TDB | 2004/03/29 14:02 |
| 6 | 242 | ((pad or pads) with (mask or nonwettable or nonwet or (non adj wettable)) and (@ad<19991110)) and ((solder or interconnection or interconnect or ball or bump) with (stress or expansion or contraction)) | USPAT; EPO; JPO; DERWENT; IBM_TDB | 2004/03/29 14:00 |
| 7 | 25 | 5523920.URPN. | USPAT | 2004/03/29 13:57 |
| 8 | 15 | ("3189978" \| "3192086" \| "3716907" \| "4336551" \| "5075965" \| "5187020" \| "5282565" \| "5291374" \| "5311404" \| "5316788" \| "5329068" \| "5357060" \| "5383093" \| "5400221" \| "5400950").PN. | USPAT | 2004/03/29 13:57 |
| 9 | 70 | ((pad or pads) with (mask or nonwettable or nonwet or (non adj wettable)) and (@ad<19991110)) and ((solder or interconnection or interconnect or ball or bump) with (fatigue)) | USPAT; EPO; JPO; DERWENT; IBM_TDB | 2004/03/29 14:17 |
| 10 | 12 | 257/118.ccls. and (mask or nonwettable or nonwet or (non adj wettable)) and (@ad<19991110) | USPAT; EPO; JPO; DERWENT; IBM_TDB | 2004/03/29 14:02 |
| 11 | 154 | 257/778.ccls. and (mask or nonwettable or nonwet or (non adj wettable)) and (@ad<19991110) and (fatigue or stress or expansion or contraction) | USPAT; EPO; JPO; DERWENT; IBM_TDB | 2004/03/29 14:12 |
| 12 | 1 | 6118182.URPN. | USPAT | 2004/03/29 14:05 |
| 13 | 6 | ("5001829" \| "5444303" \| "5471090" \| "5477082" \| "5531021" \| "5784262").PN. | USPAT | 2004/03/29 14:05 |
| 14 | 127 | 257/738.ccls. and (mask or nonwettable or nonwet or (non adj wettable)) and (@ad<19991110) and (fatigue or stress or expansion or contraction) | USPAT; EPO; JPO; DERWENT; IBM_TDB | 2004/03/29 14:11 |
| 15 | 73 | (257/738.ccls. and (mask or nonwettable or nonwet or (non adj wettable)) and (@ad<19991110) and (fatigue or stress or expansion or contraction)) not (257/778.ccls. and (mask or nonwettable or nonwet or (non adj wettable)) and (@ad<19991110) and (fatigue or stress or expansion or contraction)) | USPAT; EPO; JPO; DERWENT; IBM_TDB | 2004/03/29 14:19 |
| 16 | 50 | 257/734.ccls. and (mask or nonwettable or nonwet or (non adj wettable)) and (@ad<19991110) and (fatigue or stress or expansion or contraction) | USPAT; EPO; JPO; DERWENT; IBM_TDB | 2004/03/29 14:09 |
| 17 | 151 | 257/737.ccls. and (mask or nonwettable or nonwet or (non adj wettable)) and (@ad<19991110) and (fatigue or stress or expansion or contraction) | USPAT; EPO; JPO; DERWENT; IBM_TDB | 2004/03/29 14:09 |
| 18 | 91 | (257/737.ccls. and (mask or nonwettable or nonwet or (non adj wettable)) and (@ad<19991110) and (fatigue or stress or expansion or contraction)) not (257/778.ccls. and (mask or nonwettable or nonwet or (non adj wettable)) and (@ad<19991110) and (fatigue or stress or expansion or contraction)) | USPAT; EPO; JPO; DERWENT; IBM_TDB | 2004/03/29 14:09 |

| L Number | Hits | Search Text | DB | Time stamp |
|---|---|---|---|---|
| 1 | 1 | ("6218291").PN. | USPAT | 2004/03/29 12:25 |
| 2 | 1 | ("6218281").PN. | USPAT | 2004/03/29 12:30 |
| 3 | 2 | (("6211937") or ("5872404")).PN. | USPAT | 2004/03/29 12:43 |
| 4 | 2 | (("6118182") or ("6194667")).PN. | USPAT | 2004/03/29 13:18 |
| 5 | 6174 | (pad or pads) with (mask or nonwettable or nonwet or (non adj wettable)) and (@ad<19991110) | USPAT; EPO; JPO; DERWENT; IBM_TDB | 2004/03/29 14:02 |
| 6 | 242 | ((pad or pads) with (mask or nonwettable or nonwet or (non adj wettable)) and (@ad<19991110)) and ((solder or interconnection or interconnect or ball or bump) with (stress or expansion or contraction)) | USPAT; EPO; JPO; DERWENT; IBM_TDB | 2004/03/29 14:00 |
| 7 | 25 | 5523920.URPN. | USPAT | 2004/03/29 13:57 |
| 8 | 15 | ("3189978" \| "3192086" \| "3716907" \| "4336551" \| "5075965" \| "5187020" \| "5282565" \| "5291374" \| "5311404" \| "5316788" \| "5329068" \| "5357060" \| "5383093" \| "5400221" \| "5400950").PN. | USPAT | 2004/03/29 13:57 |
| 9 | 70 | ((pad or pads) with (mask or nonwettable or nonwet or (non adj wettable)) and (@ad<19991110)) and ((solder or interconnection or interconnect or ball or bump) with (fatigue)) | USPAT; EPO; JPO; DERWENT; IBM_TDB | 2004/03/29 14:17 |
| 10 | 12 | 257/118.ccls. and (mask or nonwettable or nonwet or (non adj wettable)) and (@ad<19991110) | USPAT; EPO; JPO; DERWENT; IBM_TDB | 2004/03/29 14:02 |
| 11 | 154 | 257/778.ccls. and (mask or nonwettable or nonwet or (non adj wettable)) and (@ad<19991110) and (fatigue or stress or expansion or contraction) | USPAT; EPO; JPO; DERWENT; IBM_TDB | 2004/03/29 14:12 |
| 12 | 1 | 6118182.URPN. | USPAT | 2004/03/29 14:05 |
| 13 | 6 | ("5001829" \| "5444303" \| "5471090" \| "5477082" \| "5531021" \| "5784262").PN. | USPAT | 2004/03/29 14:05 |
| 14 | 127 | 257/738.ccls. and (mask or nonwettable or nonwet or (non adj wettable)) and (@ad<19991110) and (fatigue or stress or expansion or contraction) | USPAT; EPO; JPO; DERWENT; IBM_TDB | 2004/03/29 14:11 |
| 15 | 73 | (257/738.ccls. and (mask or nonwettable or nonwet or (non adj wettable)) and (@ad<19991110) and (fatigue or stress or expansion or contraction)) not (257/778.ccls. and (mask or nonwettable or nonwet or (non adj wettable)) and (@ad<19991110) and (fatigue or stress or expansion or contraction)) | USPAT; EPO; JPO; DERWENT; IBM_TDB | 2004/03/29 14:19 |
| 16 | 50 | 257/734.ccls. and (mask or nonwettable or nonwet or (non adj wettable)) and (@ad<19991110) and (fatigue or stress or expansion or contraction) | USPAT; EPO; JPO; DERWENT; IBM_TDB | 2004/03/29 15:15 |
| 17 | 151 | 257/737.ccls. and (mask or nonwettable or nonwet or (non adj wettable)) and (@ad<19991110) and (fatigue or stress or expansion or contraction) | USPAT; EPO; JPO; DERWENT; IBM_TDB | 2004/03/29 14:09 |
| 18 | 91 | (257/737.ccls. and (mask or nonwettable or nonwet or (non adj wettable)) and (@ad<19991110) and (fatigue or stress or expansion or contraction)) not (257/778.ccls. and (mask or nonwettable or nonwet or (non adj wettable)) and (@ad<19991110) and (fatigue or stress or expansion or contraction)) | USPAT; EPO; JPO; DERWENT; IBM_TDB | 2004/03/29 14:09 |

| | | | | |
|---|---|---|---|---|
| 19 | 95 | 257/780.ccls. and (mask or nonwettable or nonwet or (non adj wettable)) and (@ad<19991110) and (fatigue or stress or expansion or contraction) | USPAT; EPO; JPO; DERWENT; IBM_TDB | 2004/03/29 14:11 |
| 20 | 60 | (257/780.ccls. and (mask or nonwettable or nonwet or (non adj wettable)) and (@ad<19991110) and (fatigue or stress or expansion or contraction)) not (257/778.ccls. and (mask or nonwettable or nonwet or (non adj wettable)) and (@ad<19991110) and (fatigue or stress or expansion or contraction)) | USPAT; EPO; JPO; DERWENT; IBM_TDB | 2004/03/29 14:11 |
| 21 | 101376 | (@ad<19991110) and ((fatigue or stress or expansion or contraction) with (direction or align or aligned or oriented or orient or position or positioned)) | USPAT; EPO; JPO; DERWENT; IBM_TDB | 2004/03/29 14:14 |
| 22 | 137 | ((@ad<19991110) and ((fatigue or stress or expansion or contraction) with (direction or align or aligned or oriented or orient or position or positioned))) and ((pad or pads) with (mask or nonwettable or nonwet or (non adj wettable)) and (@ad<19991110)) | USPAT; EPO; JPO; DERWENT; IBM_TDB | 2004/03/29 14:15 |
| 23 | 131 | (((@ad<19991110) and ((fatigue or stress or expansion or contraction) with (direction or align or aligned or oriented or orient or position or positioned))) and ((pad or pads) with (mask or nonwettable or nonwet or (non adj wettable)) and (@ad<19991110))) not (257/778.ccls. and (mask or nonwettable or nonwet or (non adj wettable)) and (@ad<19991110) and (fatigue or stress or expansion or contraction)) | USPAT; EPO; JPO; DERWENT; IBM_TDB | 2004/03/29 14:15 |
| 24 | 136 | (((@ad<19991110) and ((fatigue or stress or expansion or contraction) with (direction or align or aligned or oriented or orient or position or positioned))) and ((pad or pads) with (mask or nonwettable or nonwet or (non adj wettable)) and (@ad<19991110))) not ((257/737.ccls. and (mask or nonwettable or nonwet or (non adj wettable)) and (@ad<19991110) and (fatigue or stress or expansion or contraction)) not (257/778.ccls. and (mask or nonwettable or nonwet or (non adj wettable)) and (@ad<19991110) and (fatigue or stress or expansion or contraction))) | USPAT; EPO; JPO; DERWENT; IBM_TDB | 2004/03/29 14:15 |
| 25 | 130 | ((((@ad<19991110) and ((fatigue or stress or expansion or contraction) with (direction or align or aligned or oriented or orient or position or positioned))) and ((pad or pads) with (mask or nonwettable or nonwet or (non adj wettable)) and (@ad<19991110))) not (257/778.ccls. and (mask or nonwettable or nonwet or (non adj wettable)) and (@ad<19991110) and (fatigue or stress or expansion or contraction))) not ((257/737.ccls. and (mask or nonwettable or nonwet or (non adj wettable)) and (@ad<19991110) and (fatigue or stress or expansion or contraction)) not (257/778.ccls. and (mask or nonwettable or nonwet or (non adj wettable)) and (@ad<19991110) and (fatigue or stress or expansion or contraction))) | USPAT; EPO; JPO; DERWENT; IBM_TDB | 2004/03/29 14:15 |
| 26 | 1500 | 438/$.ccls. and ((solder or interconnection or interconnect or ball or bump) with (fatigue or stress or expansion or contraction)) | USPAT; EPO; JPO; DERWENT; IBM_TDB | 2004/03/29 15:22 |

| | | | | |
|---|---|---|---|---|
| 27 | 1500 | 438/$.ccls. and ((solder or interconnection or interconnect or ball or bump) with (fatigue or stress or expansion or contraction)) | USPAT; EPO; JPO; DERWENT; IBM_TDB | 2004/03/29 14:18 |
| 28 | 629 | (438/$.ccls. and ((solder or interconnection or interconnect or ball or bump) with (fatigue or stress or expansion or contraction))) and mask | USPAT; EPO; JPO; DERWENT; IBM_TDB | 2004/03/29 14:19 |
| 29 | 613 | ((438/$.ccls. and ((solder or interconnection or interconnect or ball or bump) with (fatigue or stress or expansion or contraction))) and mask) not (257/778.ccls. and (mask or nonwettable or nonwet or (non adj wettable)) and (@ad<19991110) and (fatigue or stress or expansion or contraction)) | USPAT; EPO; JPO; DERWENT; IBM_TDB | 2004/03/29 14:19 |
| 30 | 1296 | ((mask or nonwettable or nonwet or (non adj wettable)) same (elliptical or oblong or oval)) and (@ad<19991110) | USPAT; EPO; JPO; DERWENT; IBM_TDB | 2004/03/29 15:30 |
| 31 | 141 | (((mask or nonwettable or nonwet or (non adj wettable)) same (elliptical or oblong or oval)) and (@ad<19991110) ) and (pad or pads) | USPAT; EPO; JPO; DERWENT; IBM_TDB | 2004/03/29 15:22 |
| 32 | 4509 | ((fatigue or stress or expansion or contraction) same (elliptical or oblong or oval)) and (@ad<19991110) | USPAT; EPO; JPO; DERWENT; IBM_TDB | 2004/03/29 15:22 |
| 33 | 1041 | (((fatigue or stress or expansion or contraction) same (elliptical or oblong or oval)) and (@ad<19991110) ) and (pad or pads or ball or bump or bumps or balls or interconnect or interocnnetion or solder) | USPAT; EPO; JPO; DERWENT; IBM_TDB | 2004/03/29 15:23 |
| 34 | 337 | ((((fatigue or stress or expansion or contraction) same (elliptical or oblong or oval)) and (@ad<19991110) ) and (pad or pads or ball or bump or bumps or balls or interconnect or interocnnetion or solder)) and (pad or pads) | USPAT; EPO; JPO; DERWENT; IBM_TDB | 2004/03/29 15:34 |
| 35 | 333 | (((((fatigue or stress or expansion or contraction) same (elliptical or oblong or oval)) and (@ad<19991110) ) and (pad or pads or ball or bump or bumps or balls or interconnect or interocnnetion or solder)) and (pad or pads)) not ((((mask or nonwettable or nonwet or (non adj wettable)) same (elliptical or oblong or oval)) and (@ad<19991110) ) and (pad or pads)) | USPAT; EPO; JPO; DERWENT; IBM_TDB | 2004/03/29 15:24 |
| 36 | 341 | ((mask or nonwettable or nonwet or (non adj wettable)) with ((holes or openins or opening or gap or gaps or space or spaces) and (elliptical or oblong or oval))) and (@ad<19991110) | USPAT; EPO; JPO; DERWENT; IBM_TDB | 2004/03/29 15:33 |
| 37 | 341 | (((mask or nonwettable or nonwet or (non adj wettable)) with ((holes or openins or opening or gap or gaps or space or spaces) and (elliptical or oblong or oval))) and (@ad<19991110) ) not ((((((fatigue or stress or expansion or contraction) same (elliptical or oblong or oval)) and (@ad<19991110) ) and (pad or pads or ball or bump or bumps or balls or interconnect or interocnnetion or solder)) and (pad or pads)) not ((((mask or nonwettable or nonwet or (non adj wettable)) same (elliptical or oblong or oval)) and (@ad<19991110) ) and (pad or pads))) | USPAT; EPO; JPO; DERWENT; IBM_TDB | 2004/03/29 15:33 |

| 38 | 39 | ((((mask or nonwettable or nonwet or (non adj wettable)) with ((holes or openins or opening or gap or gaps or space or spaces) and (elliptical or oblong or oval))) and (@ad<19991110) ) not ((((((fatigue or stress or expansion or contraction) same (elliptical or oblong or oval)) and (@ad<19991110) ) and (pad or pads or ball or bump or bumps or balls or interconnect or interocnnetion or solder)) and (pad or pads)) not (((mask or nonwettable or nonwet or (non adj wettable)) same (elliptical or oblong or oval)) and (@ad<19991110) ) and (pad or pads)))) and (pad or pads) | USPAT; EPO; JPO; DERWENT; IBM_TDB | 2004/03/29 15:34 |